ULITIN, M.N., kand.tekhn.nauk; DEYEV, Ye.A., kand.tekhn.nauk

Modernization of internal grinding and sharpening machinery for electroerosive machining. Trakt.i sel'khozmash. 31 no.2:43-46 F '61. (MIRA 14:7)

(Electric cutting machinery)

ULITIN, M.N., kand.tekhn.nauk; DEYEV, Ye.A., kand.tekhn.nauk

Use of hard-surfacing equipment in an automated plant manufacturing steel-bushed roller chains. Trakt.i sel'khozmash. no.8:37-38 Ag '62. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut tekhnologii traktornogo i sel'skokhozyaystvennogo mashinostroyeniya.
(Hard facing) (Chains)

DEYEV, Ye.A., kand. tekhn. nauk; ULITIN, M.N., kand. tekhn. nauk

Power sources for the electrical spark machining of hard alloys. Trakt. i sel'khozmash. no.8:36-39 Ag '64.

(MIRA 17:11)

1. Nauchno-issledovatel'skiy institut tekhnologii traktornogo i sel'skokhozyaystvennogo mashinostroyeniya.

ULITIN, M.N., kand.tekhn.nauk; PANOV, A.P.

Ultrasonic machining in surface grinding. Trakt. i sel'khozmash. no.11:43-45 N '64. (MIRA 18:1)

1. Nauchno-issledovatel'skiy institut tekhnologii traktornogo i sel'skokhozyaystvennogo mashinostroyeniya.

DAVYDOV, A.S.; ULITIN, M.N.

State of and prospects for the use of electrophysical methods in working metals. Trakt. i sel'khozmash. no.9:45-47 S '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut tekhnologii traktornogo i sel'skokhozyaystvennogo mashinostroyeniya.

PHASE I BOOK EXPLOITATION SOV/3628

Ulitin, N.S.

Soprotivleniye materialov (Strength of Materials) Moscow, Gosstroyizdat, 1959. 255 p. Errata slip inserted. 10,000 copies printed.

Reviewers: MISI imeni V.V. Kuybysheva. Kafedra soprotivleniya materialov; Leningradskiy stroitel'nyy tekhnikum; Scientific Ed.: I.K. Snitko, Doctor of Technical Sciences, Professor; Ed. of Publishing House: G.N. Vilkov; Tech. Eds.: N.K. Borovnev and N.I. Rudakova.

PURPOSE: This textbook is intended for students of engineering tekhnikums specializing in the strength of materials.

COVERAGE: This is a standard textbook on strength of materials and methods of stress analysis. The coverage includes a discussion of forces and deflections, the behavior of parts and structural elements under load, classification of forces by type (transverse, bending, torsional, etc.), and practices of plotting diagrams and calculating parameters. An historical survey of Soviet studies in these fields is given. There is also a list of recommended reading. No personalities are mentioned. There are no references.

Card 1/8

ULITIN, Nikolay Sergeyevich; BEZUKHOV, N.I., zasl. deyatel' nauki i tekhniki RSFSR, doktor tekhn. nauk, prof., retsenzent

[Strength of materials] Soprotivlenie materialov. Izd.2., perer. Moskva, Vysshaia shkola, 1963. 301 p. (MIRA 17:6)

VECHER, A.S.; ILLITIN, O.A.

Glycerol and 2,3-butanediol determination in wines. Izv. vys. ucheb. zav.; pishch. tekh. no.1:103-108 '58. (MIRA 11:8)

1. Krasnodarskiy institut pishchevoy promyshlennosti, Kafedra fizicheskoy i kolloidnoy khimii.
(Wine and wine making--Analysis) (Glycerol) (Butanediol)

VECHER, A.S.; ULITIN, O.A.

Determining the activity of lipase in sunflower seeds by the formation of free glycerin. Izv.vys.ucheb.zav.pishch.tekh. no.4:152-155 '58. (MIRA 11:11)

1. Krasnodarskiy institut pishchevoy promyshlennosti, Kafedra fizicheskoy i kolloidnoy khimii.
(Lipase) (Glycerol) (Sunflower seed)

AKIMOV, V.M.; ULITIN, O.A.

Determining the acid number of vegetable oils by means of potentiometric titration. Izv.vys.ucheb.zav.; pishch.tekh. no.5:162-166 '58. (MIRA 11:11)

1. Krasnodarskiy institut pishchevoy promyshlennosti, Kafedra fizicheskoy i kolloidnoy khimii.
(Oils and fats, Edible) (Potentiometric analysis)

ULITIN, O.A.

Polyphenoloxidase in sprouting sunflower seeds. Izv.vys.ucheb. zav.; pishch.tekh. no.1:24-26 '59. (MIRA 12:6)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra fizicheskoy i kolloidnoy khimii.
(Sunflower seed) (Phenolases)

KOBLYANSKIY, A.G.; ULITIN, O.A.

Separation of some anions by electrolysis with the use of ion-exchange membranes. Zhur. prikl. khim. 34 no. 12:2699-2704 D '61. (MIRA 15:1)

1. Krasnodarskiy institut pishchevoy promyshlennosti.
(Anions) (Electrolysis) (Ion exchange)

ULITIN, O.A.

Removal of electrolytes from pentose hydrolyzates by means of electrodialysis with ion exchange membranes. Izv. vys. ucheb. zav.; pishch. tekh. no.6:73-76 '63. (MIRA 17:3)

1. Krasnodarskiy politekhnicheskiy institut, problemnaya laboratoriya.

KORMIL'TSEV, V.V.; ULITIN, R.V.

Relationship of induced alternating current polarization with Faraday's impedance and the capacitance of a double electrical layer. Trudy Inst.geofiz.UFAN SSSR no.3:125-133 '65.
(MIRA 18:8)

ULITIN, V.G.

New instruments manufactured at the Dnepropetrovsk Mine Automation Plant. Avtom. i prib. no.2:70-74 Ap-Je '63. (MIRA 16:8)

VDOVIN, D.I.; ULITIN, V.G.

Using the VIRS apparatus in the remote control of conveyers. Biul.tekh.-ekon.inform. no.1:3-5 '60. (MIRA 13:5)
(Mine haulage) (Remote control)

ULITIN, V.G., inzh.

New means of automation in the mining industry. Gor. zhur. no.4:58-61 Ap '60. (MIRA 14:6)

1. Dnepropetrovskiy zavod selenovykh vypryamiteley.
(Mineral industries)
(Automatic control)

ULITIN, V.G.

The AUK-1 equipment for automatic control of conveyers.
Biul.tekh.-ekon.inform. no.7:6-8 '60. (MIRA 13:7)
(Electric controllers) (Conveying machinery)

ULITIN, V.G.

The RUKS-2, PDU-1, PST-1 and the ZUL-1 unit for automatic control in mining. Biul.tekh.-ekon.inform. no.7:13-17 '61. (MIRA 14:8)
(Electric controllers)

UIITIN, V.G., inzh.

New equipment for automatic control and communication systems in mines and coal preparation plants. Ugol' 36 no.3:27-29 Mr '61. (MIRA 14:5)

1. Dnepropetrovskiy zavod shakhtnoy avtomatiki.
(Coal mines and mining—Equipment and supplies)
(Coal preparation plants—Equipment and supplies)
(Automatic control)

ULITIN, V.G., inzh.

Apparatus for increasing the labor safety in mines. Ugol'.prom. no.1:65-67 Ja-F '62. (MIRA 15:8)

1. Dnepropetrovskiy zavod shakhtnoy avtomatiki.
(Coal mines and mining--Safety measures) (Automatic control)

S/193/62/000/003/002/005
A004/A101

AUTHOR: Ulitin, V. G.

TITLE: Special rectifiers

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 3, 1962, 23 - 24

TEXT: The Dnepropetrovskiy zavod shakhtnoy avtomatiki (Dnepropetrovsk Plant of Automtic Mining Equipment) has started to produce the ВСК-300 (VSK-300) welding rectifier [see Byulleten' tekhniko-ekonomicheskoy informatsii, 1960, no. 12, page 18], the ВС-600 (VS-600) welding rectifier and the ВС-2М (VS-2M) rectifier-stabilizer. The VS-600 rectifier is intended for submerged shielded arc welding. It is supplied from the three-phase network of 380 v, 50 cps. The power input amounts to some 30 kV-amp. A sectioned primary transformer winding enables the stepped regulation of the secondary voltage. The selenium rectifying unit is connected in a bridge circuit of full-wave rectification. The rectified welding current of the VS-600 rectifier amounts to up to 600 amp, the rectified voltage 20 - 40 v, the number of regulation stages is 27. The VS-2M rectifier-stabilizer is intended for the conversion of AC into stabilized DC of 80 and 27 v,

Card 1/2

Special rectifiers

S/193/62/000/003/002/005
A004/A101

with which the electric ВП -4 (VP-4), ВП -4 М (VP-4M), ВЭ -2 (VE-2) and ВЭ -2 М (VE-2M) electric hygrometers, used for grain-storehouses, are supplied. The VS-2M rectifier is supplied from the a-c network of 127/220 v, 50 cps. The power input does not exceed 35 v-amp. The rectifying unit is equipped with Д7В (D7V) germanium diodes connected in a bridge circuit. The rectified output voltage is stabilized by an СГ3С (SG3S) gas-discharge stabilizer. The adjustment of the device on the rectified voltage of 80 and 27 v is effected by an adjustable resistor. The large-scale production of the mentioned rectifiers is scheduled for 1962.

Card 2/2

ULITIN, V.G., inzh.

New rectifiers for welding. Mashinostroenie no.3:67-70 My-Je '62. (MIRA 15:7)

1. Dnepropetrovskiy zavod shakhtnoy avtomatiki.
(Electric current rectifiers) (Electric welding)

ULITIN, V.G.

New equipment for ore dressing plants. Avtom.i prib. no.4: 68-73 O-D '62. (MIRA 16:1)

1. Dnepropetrovskiy zavod shakhtnoy avtomatiki.
(Ore dressing--Equipment and supplies)

ULITIN, V.G.

The VS-2M rectifier-regulator. Mashinostroenie no.4:116 Jl-Ag '62. (MIRA 15:9)
(Electric current rectifiers)

S/135/62/000/007/005/010
A006/A101

AUTHOR: Ulitin, V. G., Engineer

TITLE: Rectifiers BCK-300 (VSK-300) and BC-600 (VS-600) for welding operations

PERIODICAL: Svarochnoye proizvodstvo, no. 7, 1962, 32 - 34

TEXT: The Dnepropetrovsk plant of mining automation, in cooperation with the Institute of Electric Welding imeni Ye. O. Paton, developed the welding rectifiers VSK-300 and VS-600. Rectifier VSK-300 is power-supplied from a 380-v three-phase network. Voltage control is brought about by "star" or "triangle" connection and different switching-on of volt-additional transformers. The rectified voltage is smoothly controlled within a range of 42 steps, by symmetrical and asymmetrical changes of voltage, supplied to the rectified bridge. Rectified voltage at 400 amp current is not less than 34 v. This combined rectifier is intended for manual, semi-automatic and automatic submerged arc welding in CO_2 with smooth voltage control within 15 - 51 v. Rectifier VS-600 is intended for semi-automatic and automatic welding in a gas shield and with a submerged arc. To

Card 1/2

Rectifiers...

assure stepped control of secondary voltage the primary transformer coiling is sectioned. The rectified welding current is up to 600 amps, and rectified voltage 20 - 40v. Production in series of the VSK-300 device has been started in 1961, and is intended in 1962 for VS-600. There are 3 figures.

Card 2/2

ULITIN, V.G.

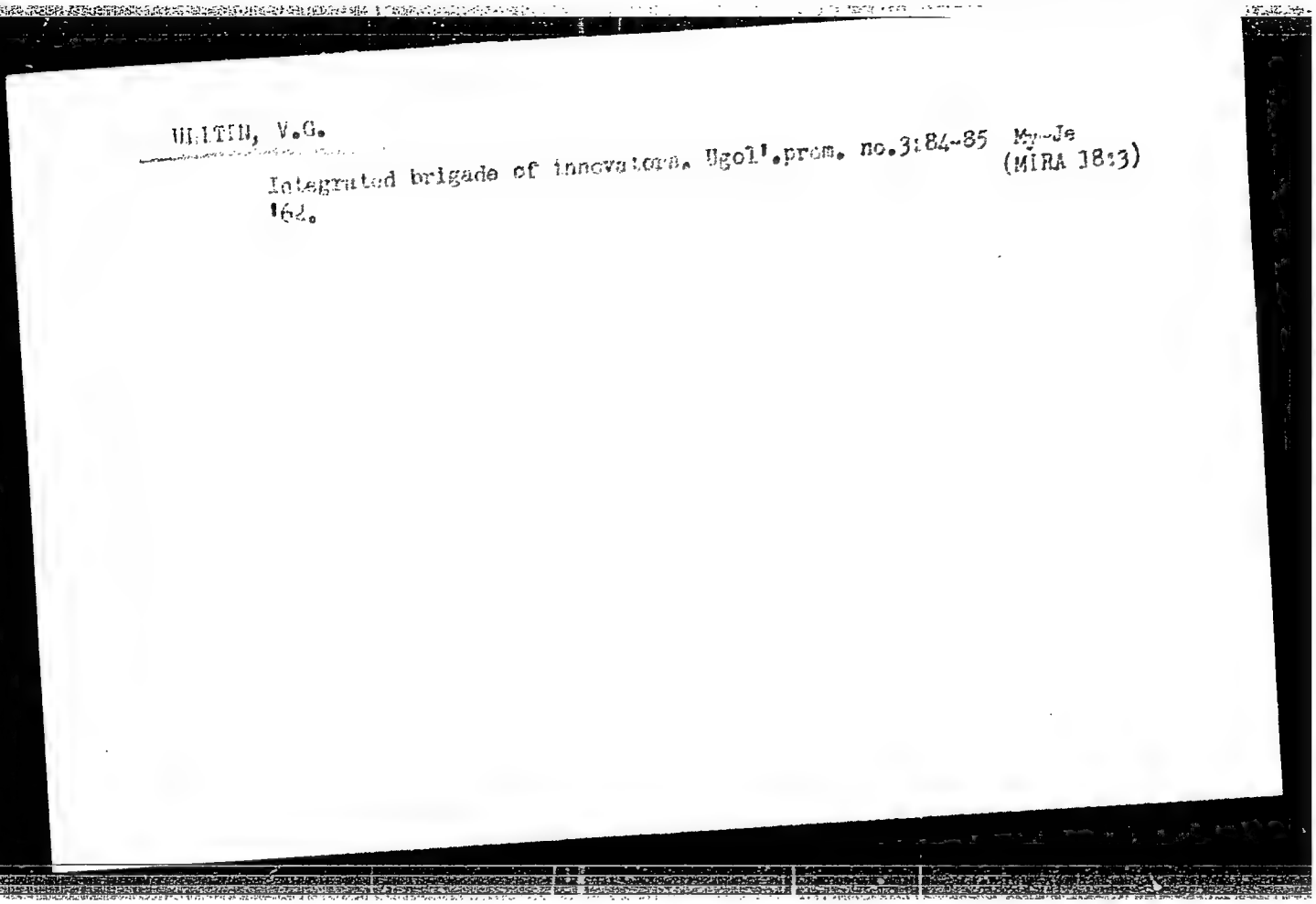
New achievements of an integrated brigade of innovators. Avtom. i prib. no.1:87-88 Ja-Mr '63. (MIRA 16:3)

1. Dnepropetrovskiy zavod shakhtnoy avtomatiki.
(Dnepropetrovsk—Technological innovations)

ULITIN, V.G.

AKV-2 unit for air control. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.inform. no.3:20-21 '63. (MIRA 16:4)

(Mine ventilation--Equipment and supplies)



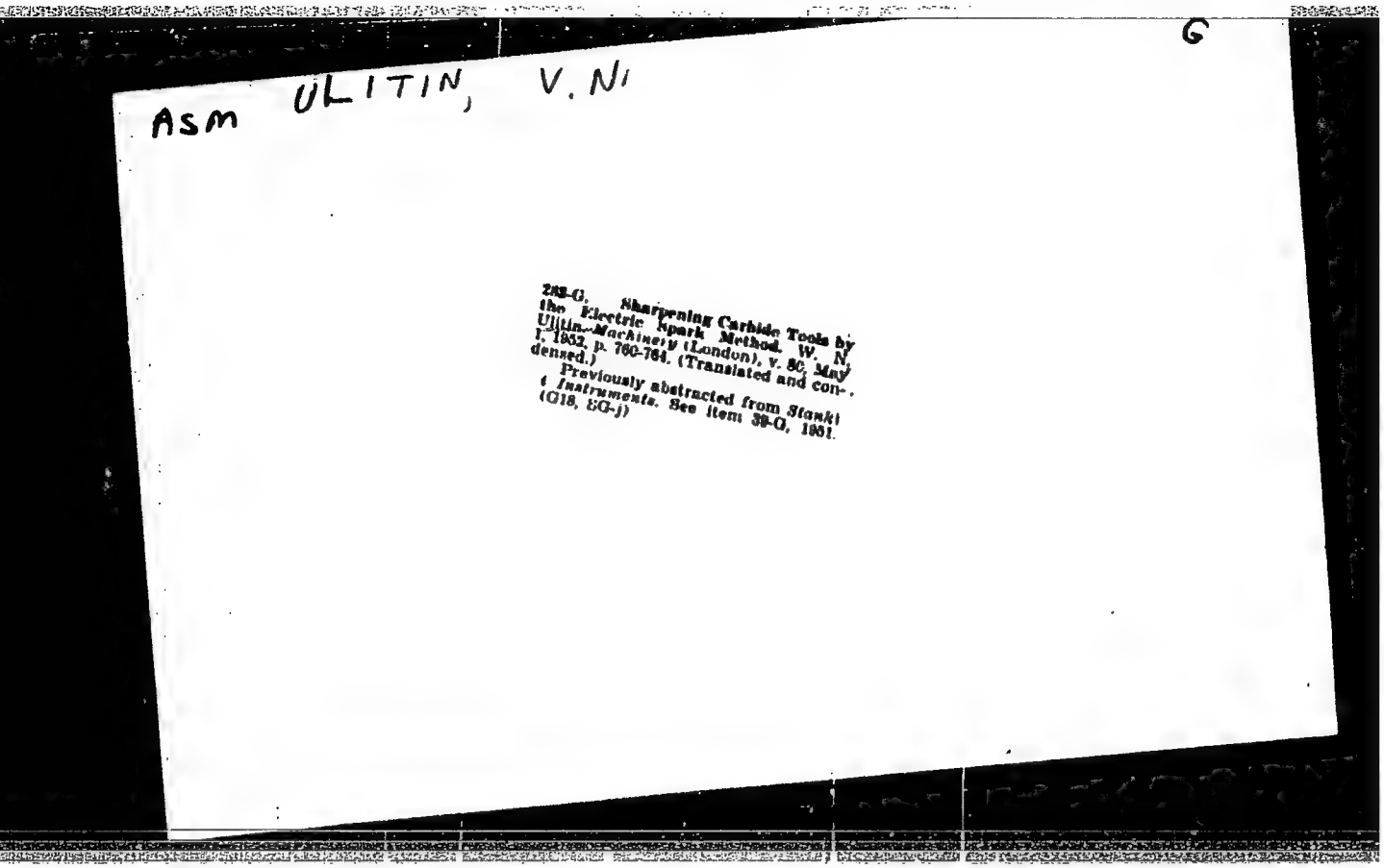
WEITIN, V.G.

Integrated brigade of innovators. Ugol'.prom. no.3:84-85 My-Je (MIRA 18:3)
'64.

ULITIN, V.

Mechanics Zhigai.o is at the head of the brigade. Izobr. i rats. no.1:32 Ja '62. (MIRA 14:12)

1. Dnepropetrovskiy zavod shakhtnoy avtomatiki. (Dnepropetrovsk—Mining machinery)



Asm ULITIN, V. N.

G

283-G, Sharpening Carbide Tools by the Electric Spark Method. W. N. Ulitin. *Machinery* (London), v. 80, May 1, 1952, p. 760-764. (Translated and condensed.)

Previously abstracted from *Stanki i Instrumenty*. See item 39-G, 1951. (G18, EG-j)

ULITINA, A.A.

Mechanism for retrieving hair from wash water. Obm. tekh. opyt. [MLP] no.29:26-27 '57. (MIRA 13:1)
(Leather industry--Equipment and supplies)

SPIVAK, F.N., kand.med.nauk; ULITINA, A.I., kand.med.nauk

Some functional studies of persons disabled by bronchectasis under industrial conditions. Trudy LIETIN 2:36-45 '59.
(MIRA 13:7)

(BRONCHIECTASIS) (DISABILITY EVALUATION) (RESPIRATION)

SPIVAK, F.N., kand.med.nauk; ULITINA, A.I., kand.med.nauk

Principles of work organization and work recommendations for persons disabled by chronic nonspecific pneumonia and bronchiectasis. Trudy LIETIN 2:46-54 '59. (MIRA 13:7)
(DISABILITY EVALUATION) (DISABLED--REHABILITATION, ETC.)
(LUNGS--DISEASES)

ULITINA, A.I., kand.med.nauk

Improvement of working conditions for invalids in industrial co-operatives. Gig.i san. 24 no.11:76-78 N '59. (MIRA 13:4)

1. Iz otdela organizatsii truda Leningradskogo nauchno-issledovatel'skogo instituta ekspertizy trudosposobnosti i organizatsii truda invalidov.
(INDUSTRIAL MEDICINE)

L 14035-66 EPF(n)-2/EWT(m)/EWP(b)/EWP(t) IJP(c) WW/JD/JG

ACC NR: AR5020050 SOURCE CODE: UR/0081/65/000/012/M021/M022

52
B

AUTHOR: Ulitina, G.A.; Filatov, A.G.

ORG: none

TITLE: Expanding water proof compounds

SOURCE: Ref. zh. Khimiya, Abs. 12M197

REF SOURCE: Sb. vopr. sovrem. str-va i arkitekt. Kiev, Budivel'nyk, 1964, 511-515

TOPIC TAGS: cememt, ceramic to metal seal, aluminum powder

15,44

TRANSLATION: For sealing the seems and bars between ferroconcrete parts, additions of expanding, highly durable, waterproof and quick-hardening solutions to Portland cememt were suggested, based on the compensated expansion principle developed at UkrVODGEO. Complex additives of powdered aluminum and sulfite-alcohol slop guarantee an expansion during the first 10 days, when kept in a humid and watery storage, and also decrease shrinking in airy storages. They considerably speed up hardening and strengthen the entire hardening area during the processes of compression, expansion and bending. Research has shown that additives of aluminum powder decreased the strength and waterproofness of the solutions, whereas calcium chloride and aluminum sulfate increased them. Some expanding solutions had a waterproofness in excess of 16 atm. Ye. Miropol'skaya.

SUB CODE: 13,07, 11

Card 1/1

IVANOV, N.A.; STADUKHIN, V.D.; ULITINA, G.G.

Charts for the approximate calculation of anomalous effect in the methods of magnetic profiling and sounding. Trudy Inst.geofiz.UFAN SSSR no.3:65-71 '65. (MIRA 18:8)

STADUKHIN, V.D.; ULITINA, G.G.

Magnetic profiling with square and retangular frames in the Techenskoye iron ore deposit. Trudy Inst.geofiz.UFAN SSSR no.3:73-77 '65. (MIRA 18:8)

ALEYNIKOV, A.L.; STADUKHIN, V.D.; ULITINA, G.G.

Interpretation of magnetic and gravity measurements using data of artificial magnetic biasing. Trudy Inst.geofiz.UFAN SSSR no.3:97-102 '65. (MIRA 18:8)

KARAGEZYAN, M.A., kand.med.nauk; ANTONIK, N.N., ordinator; ULITINA, I.A., ordinator

Treatment of trophic ulcers with an oil preparation of carotene. Vest.derm. i ven. no.1:30-33 '62. (MIRA 15:1)

1. Iz kliniki kozhnykh bolezney (zav. kafedroy - doktor med.nauk L.A. Neradov) Kubanskogo meditsinskogo instituta (dir. - prof. V.K. Suprunov) i Krasnodarskogo gorodskogo kozhno-venerologicheskogo dispansera (glavnyy vrach I.F. Frintchenko).
(CAROTENE) (ULCERS)

LEVIKOV, S.I.; ULITINA, K.N.

[redacted]

Bactericidal lamps. Zh. obsh.biol. 12 no.2:148-157 Mar-Apr 51.
(CIML 20:8)

ULITINA, L.M.

New Middle-Devonian species of the families Zonophyllidae and Digonophyllidae in Transcaucasia. Paleont. zhur. no.4: 30-38 '63. (MIRA 17:1)

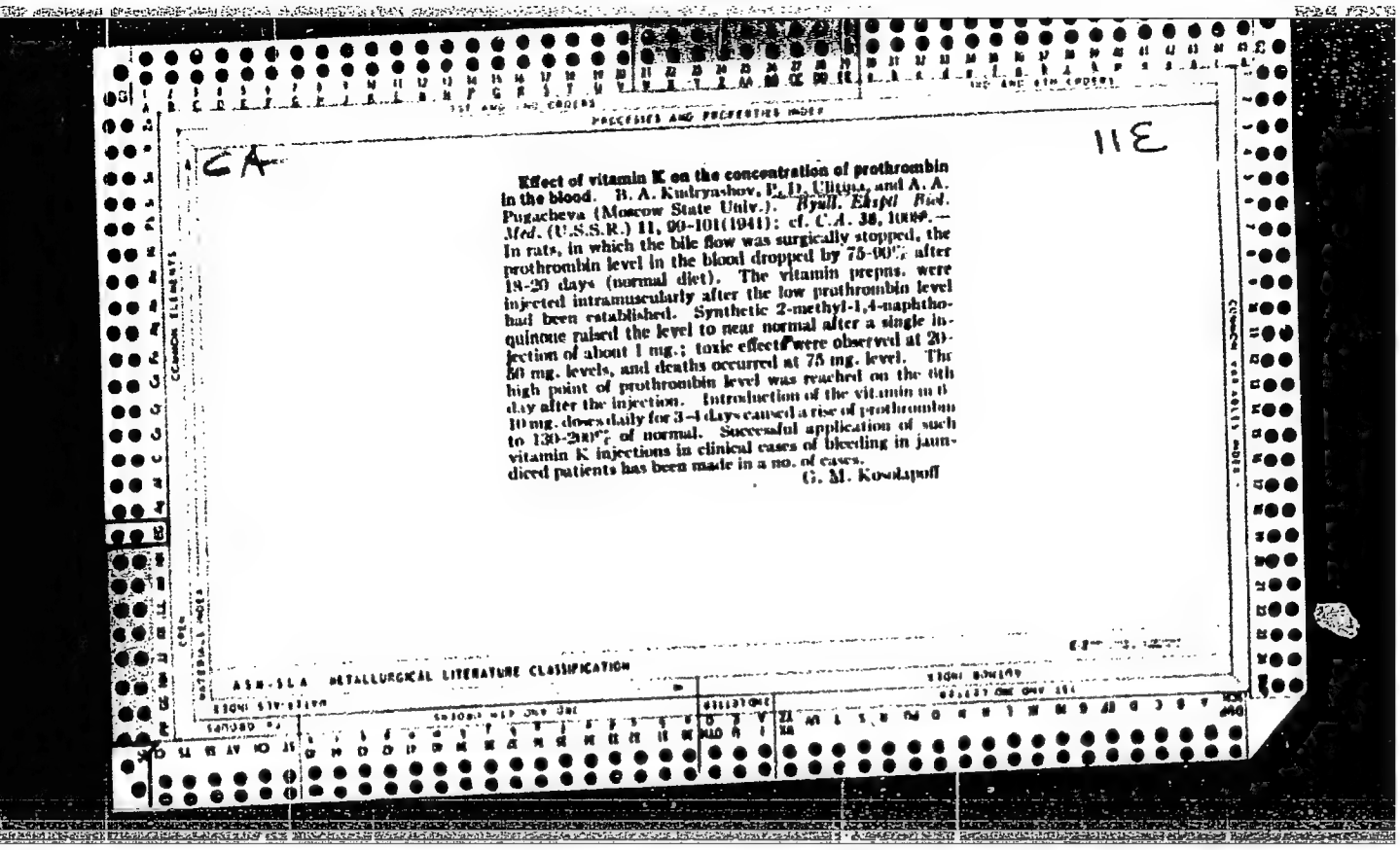
1. Paleontologicheskiy institut AN SSSR.

ULITINA, L.M.

Genus Cystiphylloides Joh from the Devonian of Transcaucasia. Biul. MOIP.Otd.geol. 38 no.2:162-163 Mr-Ap '63.

(MIRA 16:5)

(Transcaucasia—Corals, Fossil)



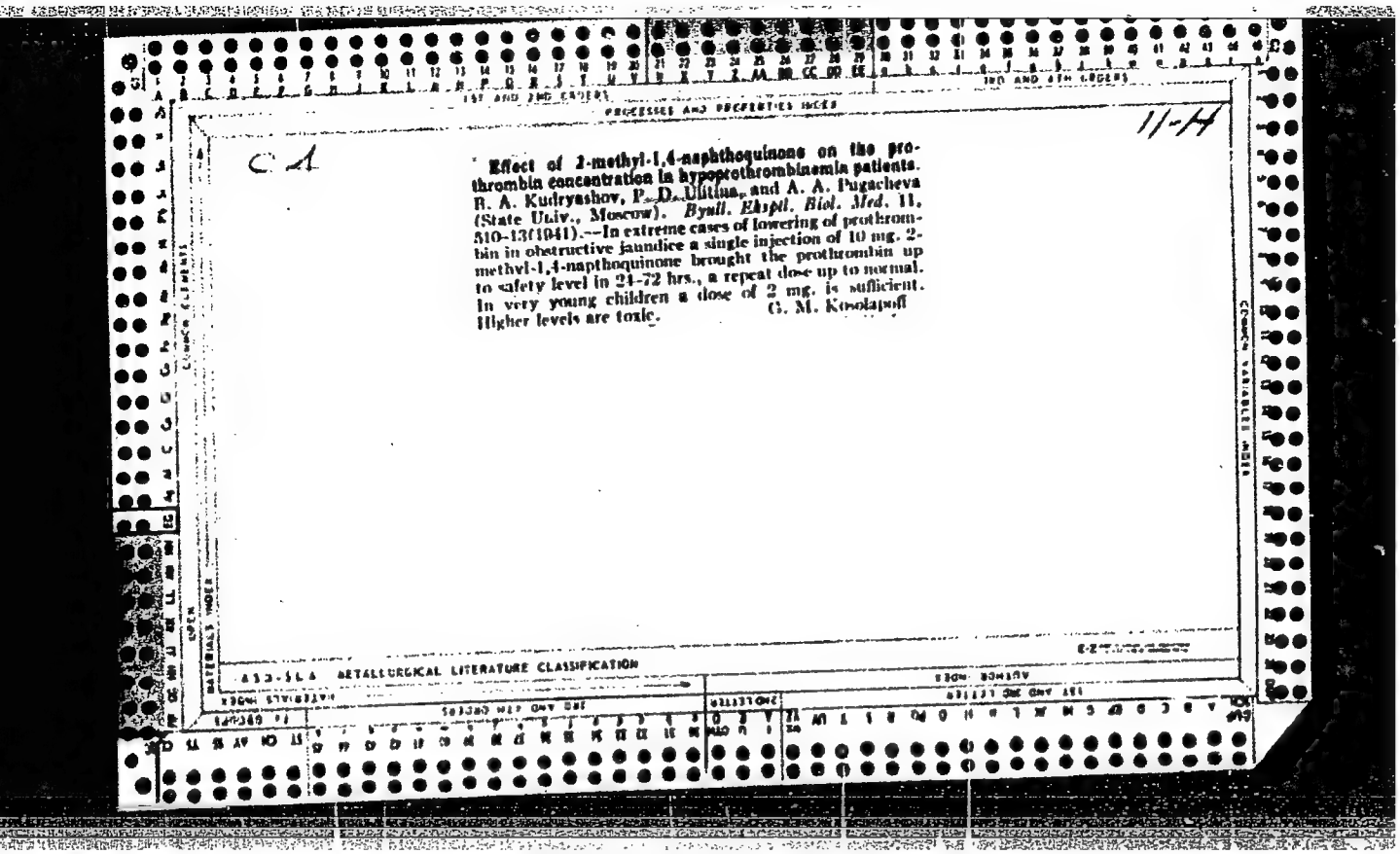
CA

11E

Effect of vitamin K on the concentration of prothrombin in the blood. B. A. Kudryashov, E. D. Ulitina, and A. A. Pugacheva (Moscow State Univ.). *Byull. Eksptl Biol. Med.* (U.S.S.R.) 11, 99-101(1941); cf. *C.A.* 38, 1089.—In rats, in which the bile flow was surgically stopped, the prothrombin level in the blood dropped by 75-90% after 18-20 days (normal diet). The vitamin preps. were injected intramuscularly after the low prothrombin level had been established. Synthetic 2-methyl-1,4-naphthoquinone raised the level to near normal after a single injection of about 1 mg.; toxic effects were observed at 20-50 mg. levels, and deaths occurred at 75 mg. level. The high point of prothrombin level was reached on the 6th day after the injection. Introduction of the vitamin in 0.10 mg. doses daily for 3-4 days caused a rise of prothrombin to 130-200% of normal. Successful application of such vitamin K injections in clinical cases of bleeding in jaundiced patients has been made in a no. of cases.

G. M. Kosolapoff

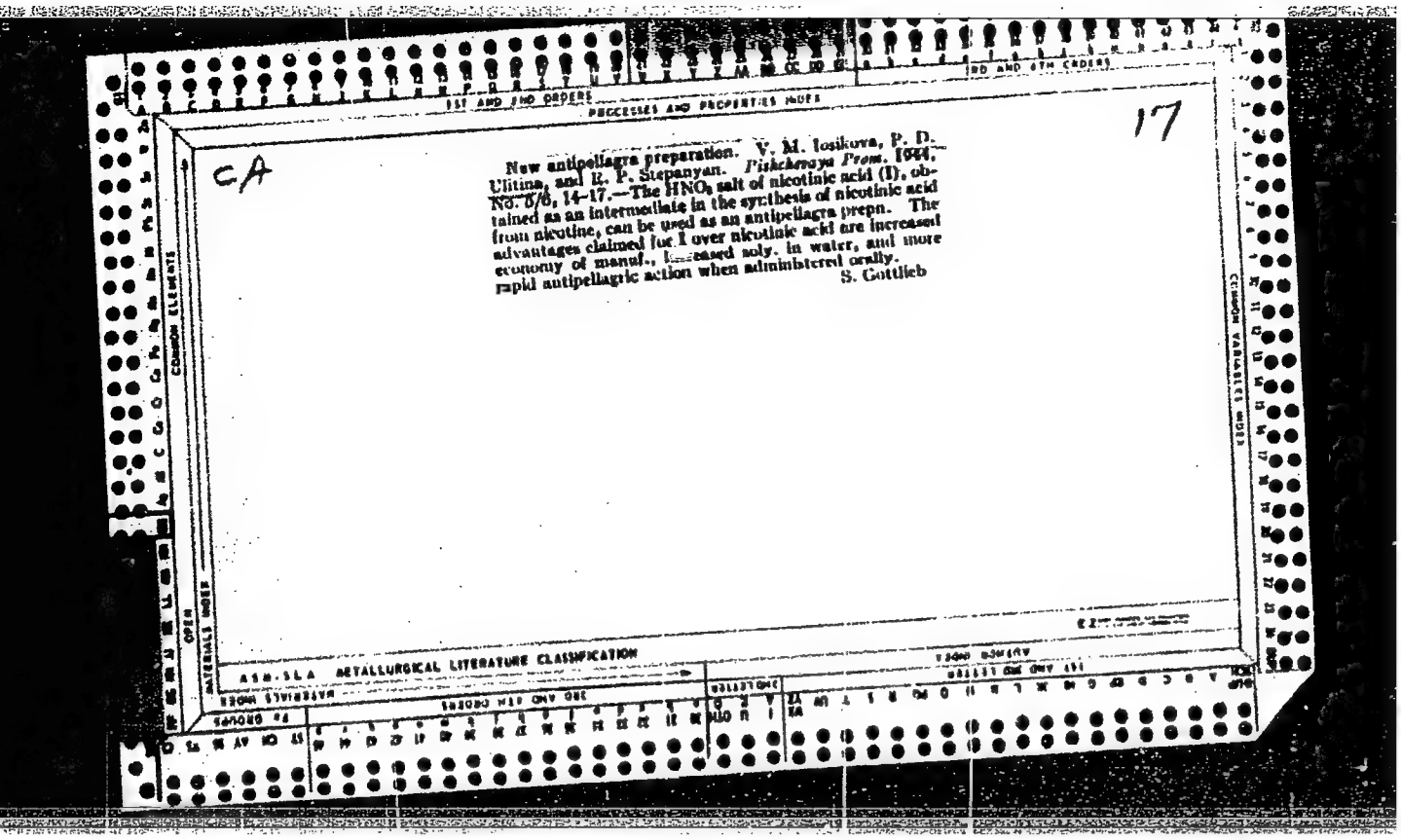
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

11-H

Effect of 2-methyl-1,4-naphthoquinone on the prothrombin concentration in hypoprothrombinemia patients. R. A. Kudryashov, P. D. Ulitina, and A. A. Pugacheva (State Univ., Moscow). *Byull. Eksptl. Biol. Med.* 11, 510–13(1941).—In extreme cases of lowering of prothrombin in obstructive jaundice a single injection of 10 mg. 2-methyl-1,4-napthoquinone brought the prothrombin up to safety level in 24–72 hrs., a repeat dose up to normal. In very young children a dose of 2 mg. is sufficient. Higher levels are toxic. G. M. Kosolapoff



ULITINA, P. D. PA 45/49T67

USSR/Medicine - Zoology Dec 48
Medicine - Vitamin K, Analogous

"Study of Biological Activity of Analogues of Vitamin K," P. D. Ulitina, B. A. Kudryashov, Inst of Zool, Moscow State U imeni M. V. Lomonosov, 4 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 4

Obtains comparative data on activity of following compounds on mice: 2-methyl-1, 4-naphthoquinone, 2-methyl-1, 4-naphthoquinone-3-sulfonylic potassium, and a bisulfite compound of 2-methyl-1, 4 naphthoquinone. Finds latter most valuable since it is easily soluble in water, has high

45/49T67

USSR/Medicine - Zoology (Contd) Dec 48

activity of vitamin K, and is distinguished by extremely low toxicity in comparison with the other two substances. Submitted by Acad Ya. O. Parnas, 5 Oct 48.

45/49T67

CA

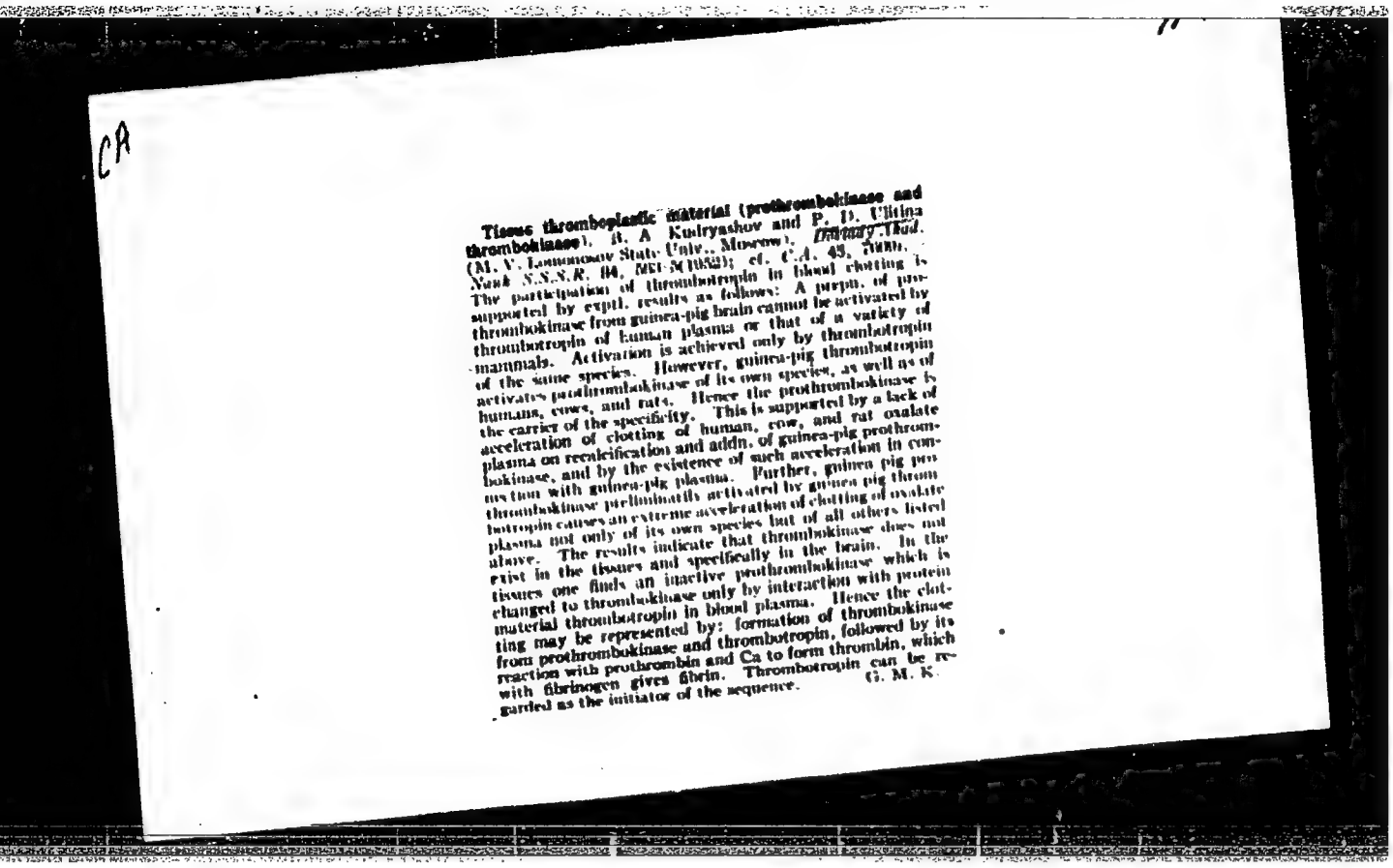
11 B

Species specificity of prothrombokinase and thrombotropin. P. D. Ulitina and B. A. Kudryashov (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 77, 673–6(1951).—Examn. of fresh oxalated plasma of humans, rats, guinea pigs, cows, and dogs, use being made of prothrombokinase from human brain and brains of various animals (cf. K., *et al.*, *C.A.* 41, 5930d, 6340g), and of thrombotropin of the plasma of the respective species for activation of prothrombokinase, revealed: (1) oxalated plasma clots more slowly than called for by the characteristic period for the given species in the presence of an optimum Ca-ion concn., but addn. of prothrombokinase to the system considerably accelerates the clotting. Preliminary activation of prothrombokinase by thrombotropin accelerates the clotting still further (3.2–3.8 sec. difference in human, rat, cow, and dog, 7 sec. in guinea pig). The clotting rate under the effect of prothrombokinase of one species on the plasma of another species depends greatly upon the species. Human prothrombokinase greatly stimulates clotting of human plasma as well as that of other species; rat, dog, and rabbit plasma clot more rapidly with human prothrombokinase than does the human plasma, and rat plasma clots more rapidly than under influence of rat prothrombokinase. Conversely, none of the other species of prothrombokinase showed an acceleration of clotting of human plasma to the level achieved with human prothrombokinase; prothrombokinase of guinea pig actually lowers the clotting rate of human and cow plasma. Activated prothrombokinases, however, derived from any species greatly accelerate clotting rate of plasma of other species, even if the process is retarded without activation, and the differences in the rates largely vanish after activation; this is true for activation by thrombotropin of the same species. Hence, the interaction of prothrombokinase with thrombotropin forms thrombokinase that is essentially devoid of species specificity. Cross-activation is effective for human, rat, guinea pig, cow, dog, and rabbit thrombotropin when applied to human prothrombokinase and the product is not specific. Prothrombokinase of guinea pig, however, is activated most strongly by thrombotropin of the same species, as neither human, rat, nor cow thrombotropin affect it. Hence, prothrombokinase and thrombotropin have a specific structure in each species, but activation within the species leads to nonspecific thrombokinase. Interspecies activation may or may not occur.

G. M. Kosolapoff

Biological Soil Sci-Res. Inst.

1951



CA

Tissue thromboplastic material (prothrombokinase and thrombokinase). B. A Kudryashov and P. D. Ulitina (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 84, 561-3(1952); cf. *C.A.* 45, 7000i. The participation of thrombotropin in blood clotting is supported by expt. results as follows: A prepn. of prothrombokinase from guinea-pig brain cannot be activated by thrombotropin of human plasma or that of a variety of mammals. Activation is achieved only by thrombotropin of the same species. However, guinea-pig thrombotropin activates prothrombokinase of its own species, as well as of humans, cows, and rats. Hence the prothrombokinase is the carrier of the specificity. This is supported by a lack of acceleration of clotting of human, cow, and rat oxalate plasma on recalcification and addn. of guinea-pig prothrombokinase, and by the existence of such acceleration in combination with guinea-pig plasma. Further, guinea pig prothrombokinase preliminarily activated by guinea pig thrombotropin causes an extreme acceleration of clotting of oxalate plasma not only of its own species but of all others listed above. The results indicate that thrombokinase does not exist in the tissues and specifically in the brain. In the tissues one finds an inactive prothrombokinase which is changed to thrombokinase only by interaction with protein material thrombotropin in blood plasma. Hence the clotting may be represented by: formation of thrombokinase from prothrombokinase and thrombotropin, followed by its reaction with prothrombin and Ca to form thrombin, which with fibrinogen gives fibrin. Thrombotropin can be regarded as the initiator of the sequence. G. M. K.

"Species Specificity of Thrombogenic Components of the Blood," B.A. Kudryashov, L.I. Murav'yeva, P.D. Ulitina, Soil Biol Sci-Res Inst, Moscow State U

DAN USSR, Vol 88, No 4, pp 711-712

The three phases of blood coagulation differ in regard to the degree of species specificity shown in the interaction between thrombogenic components. The strongest species specificity is exhibited in the 1st phase (activation of prothrombokinase with thrombotropin). In the 2d phase (interaction of thrombokinase with prothrombin in the presence of Ca ions), species specificity is not clearly pronounced. In the third phase (interaction of thrombin with fibrinogen), species specificity was not observed within the range of species investigated. Presented by Acad A.I. Oparin 25 Nov 52.

256T40

USSR/Medicine - Biochemistry

Card 1/1 Pub. 22 - 31/47

Authors : Kudryashov, B. A., and Ulitina, P. D.

Title : Study of the thromboplastic activity of blood

Periodical : Dok. AN SSSR 98/5, 815-817, Oct 11, 1954

Abstract : The relation between the amount of thrombokinase (thromboplastin), originating during the process of blood coagulation, and the concentration of thrombotropine in the plasma and the full-value of the prothrombokinase source, is explained. The deficiency of any one component was found to have a negative effect (limiting effect) on the formation of thrombokinase. The effect of dicumarol injection on the thromboplastic activity of the blood is explained. Seven USSR references (1948-1954). Tables.

Institution : The M. V. Lomonosov State University, Moscow

Presented by : Academician V. A. Engel'gardt, July 6, 1954

ULITINA, P.D.

KUDRYASHOV, B.A., prof.; ANDREYENKO, G.V.; ULITINA, P.D.; BAZAS'YAN, G.G.; PASTOROVA, V.Ye.; SYTINA, N.P.; KALISHEVSKAYA, T.M.; SHIMONAYEVA, Ye.Ye.

Nature of hemorrhage in experimental radiation sickness in animals [with summary in English, p.60]. Probl.gemat. i perel.krovi 2 no.6: 3-11 N-D '57. (MIRA 11:2)

1. Iz biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta.

(HEMORRHAGE, experimental,
x-ray induced in animals (Rus))
(ROENTGEN RAYS, injurious effects,
exper. hemorrh. induced in animals (Rus))

KUDRYASHOV, B.A.; ANDREYENKO, G.V.; ULITINA, P.D.

Thrombotropin and prothrombokinase in marine fishes. Nauch. dokl.vys.shkoly;biol.nauki no.3:98-101 '58. (MIRA 11:12)

1. Predstavlena laboratoriyey fiziologii i biokhimii svertyvaniya krovi Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(THROMBOTROPIN) (FISHES--PHYSIOLOGY) (PROTHROMBOKINASE)

ULITINA, P.D., KUDRYASHOV, B.A.

Determining the thromboplastic activity of human blood. Lab. delo 4 no.6:7-9 N-D '58 (MIRA 11:12)

1. Iz laboratorii fiziologii i biokhimii svertyvaniya krovi (zav. prof. B.A. Kudryashov) biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta.
(BLOOD--COAGULATION)

AUTHORS: Kudryashov, B. A., Ulitina, P. D. SOV/20-120-3-66/67

TITLE: Experimental Data on the Existence and Rôle of the Physiological Anticoagulation System (ACS) in the Organism (Eksperimental'nyye dannyye o sushchestvovanii i znachenii fiziologicheskoy antisvertyvayushchey sistemy [ASS] v organizme)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 120, Nr 3, pp. 677-680 (USSR)

ABSTRACT: The study of the direct causes of an intravascular formation of thrombi has up to now not shown any definite results. It was assumed that on the whole thromboses occur in connection with an increased amount of thrombogen protein components in the blood (references 1, 2), furthermore as a consequence of manifestations of coagulation (references 3 - 5), or pathological changes of the vascular walls, which causes moistening of the surfaces (references 5 - 7). An experimental investigation of the intravascular formation of thrombi led the authors to the

Card 1/5

conclusion that the coagulated matters in the blood channel are apparently caused by a disturbance of a physiological system of anticoagulation. It is the aim of this paper to prove the existence of such a system. In the introduction material and methods are described. White rats were used as experimental animals; they had 110 - - 150 g. The blood was drawn from the v. jugularis, where also the intravenous injections were administered. Thromboplastin was prepared from the brain-tissue (according to reference 8). 0,1 M sodium oxalate solution was used for the stabilization of the blood. As known, the brain-thromboplastin considerably accelerates the coagulation of the oxalate blood or of the plasm at its recalcification in vitro. The same is observed in the case of fresh blood in vitro. This is caused by the absence of the tissueprothrombokinases in the thromboplastin preparation. Under the influence of plasm components this enzyme changes into an active thrombokinase (references 9, 10), the presence of which is necessary for the change of the prothrombin into thrombin in the presence of calcium

ions. It was to be assumed therefore that in the case of an intravenous administration of thromboplastin in vivo coagulated matter will develop in the vessels. On table 1, however, we can see that this process was only in 4 % of the cases fatal. The study of the entire coagulation of blood in surviving animals showed that this process is postponed more than tenfold and that it remains at that level for 7 - 10 minutes. Then, slowly normal coagulation sets in again. Thus the administration of thromboplastin in vivo reduced the capacity of coagulation abruptly, contrary to experiments in vivo (table 1), instead of increasing it. The occurring of the thrombin in the blood channel apparently incites any reflectorial mechanism to activity; in the course of that process humoral agents are secreted into the circulating blood which stop the biochemical mechanism of blood coagulation almost instantly and thus save the organism from death. This hypothesis was examined in animals who were deeply anaesthetized by ether. Almost immediately after the thrombin injection they died of

a coagulation of blood in the vessels (table 3). The narcosis or anaesthesia sometimes eliminated the receptors which react on the presence of the thrombin in the blood channel and the animals died of thrombosis, whereas the experimental animals remained alive. Analyses showed that the fibrino-content in the blood of the experimental animals decreased almost fourfold. Heparin-like substances which delay coagulation occurred in considerable quantities. An ACS exists in the organism which reacts on the presence of thrombin in the blood channel and which in the course of its action eliminates the coagulating mechanism. There are 3 tables and 10 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: February 18, 1958, by V. A. Engel'gardt, Member, Academy of Sciences, USSR

SUBMITTED: February 17, 1958

Experimental Data on the Existence and Role of SOV/ [illegible]
the Physiological Anticoagulation System (AOS) in the Organism

1. Thrombasis--Theory 2. Blood--Pathology 3. Coagulases--Physiological effects
4. Blood--Coagulation

Card 5/5

ULITINA, P.D.

Change in the thrombotropin content of human blood following the administration of dicumarin. Probl. gemat. i perel. krovi 4 no. 10:23-26 O '59. (MIRA 13:8)

1. Iz laboratorii fiziologii i biokhimii svertyvaniya krovi (zaveduyushchiy - fakul'teta Moskovskogo gosudarstvennogo universiteta.
(THROMBOTROPIN) (COUMARIN)

KUDRYASHOV, B.A., prof.; ULITINA, P.D.

Experimental studies on thrombogenesis in the vascular bed. Khirurgiia 35 no.2:77-82 F '59. (MIRA 12:5)

1. Iz laboratorii fiziologii i biokhimii svertyvaniya krovi Moskovskogo gosudarstvennogo ordena Lenina universiteta imeni M.V.Lomonosova.
(THROMBOSIS, exper.
thrombogenesis (Rus))

KUDRYASHOV, B.A.; ANDREYENKO, G.V.; BAZAZ'YAN, G.G.; KALISHEVSKAYA, T.M.; PASTOROVA, V.Ye.; SYTINA, N.P.; ULITINA, P.D.

The physiological anticoagulating system and experimental prethrombotic state of the organism. Vest. Mosk. un. Ser. 6:3-23 Mr-Ap '61. (MIRA 14:5)

1. Laboratoriya fiziologii i biokhimii svertyvaniya krovi Moskovskogo gosudarstvennogo universiteta.
(BLOOD—COAGULATION)

KUDRYASHOV, B.A.; ANDREYENKO, G.V.; BAZAZ'YAN, G.G.; KALISHEVSKAYA, T.M.; PASTOROVA, V.Ye.; SYTINA, N.P.; ULITINA, P.D. (Moskva)

Physiological anticoagulation system in an experimental prethrombotic state of the organism. Klin.med. 39 no.3:19-30 Mr.'61. (MIRA 14:3)

1. Iz laboratorii fiziologii i biokhimii svertyvaniya krovi (rukovoditel' - prof. B.A. Kudryashov) Moskovskogo universiteta.
(BLOOD—COAGULATION)

POSTNOV, Yu.V.; ANANCHENKO, V.G.; ULITINA, P.D. (Moskva)

Effect of disorders of vascular-connective tissue permeability caused by histamine on some physiological indices of the blood anticoagulant system under experimental conditions. Arkh. pat. 26 no.5:31-38 '64 (MIRA 18:1)

1. Patologoanatomicheskaya laboratoriya (zav. - doktor med. nauk A.M. Vikhert) Instituta terapii AMN SSSR (direktor-deystvitel'nyy chlen AMN SSSR prof. A.L. Myasnikov) i laboratoriya bioknimii i fiziologii svertyvaniya krovi (zav. - prof. B.A. Kudryashov) Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

ULITINA, Z.P.; SMIRNOVA, G.V.; BOGOSLOVSKAYA, L.N., inzh.-khimik

New formula for thickeners made with alga flour for printing with glacial, mordant and vat dyes. Tekst. prom. 25 no.9:64 S '65. (MIRA 18:10)

1. Nachal'nik nauchno-issledovatel'skoy laboratorii Shuyskoy ob"yedinennoy fabriki (for Ulitina). 2. Starshiy inzh. nauchno-issledovatel'skoy laboratorii Shuyskoy ob"yedinennoy fabriki (for Smirnova). 3. Shuyskaya ob"yedinennaya fabrika (for Bogoslovskaya).

STEPUHOVICI, A.D. [Stepukhovich, A.D.]; ULITKI, V.A. [Ulitskiy, V.A.]

Steric factors of the reactions of recombination, disproportionation of radicals, and their formation from the molecules. Analele chimie 17 no.2:77-84 Ap-Je '62.

ULITKO, A.F.

Equilibrium of an elastic cone loaded by a concentrated moment at the apex. Dop.AN URSR no.10:1349-1352 '60. (MIRA 13:11)

1. Institut mekhaniki AN USSR. Predstavleno akademikom AN USSR G.N.Savinym [Savin, H.M.]
(Elastic plates and shells)

ULITKO, A.F. (Kiyev)

General problem of the equilibrium of an elastic cone.
Prykl.mekh. 6 no.3:303-310 '60. (MIRA 13:8)

1. Institut stroitel'noy mekhaniki AN USSR.
(Elastic plates and shells)

ULITKO, A.F. [Ulitko, A.T.]

Using the method of eigen vector-functions in solving certain problems of the three-dimensional theory of elasticity. Prykl. mekh. 6 no.4:403-410 '60. (MIRA 13:11)

1. Institut mekhaniki AN USSR.
(Elasticity)

ULITKO, A. F.

Cand Phys-Math Sci - (diss) "Solution of spatial problems of the theory of elasticity by the method of eigen vector-functions." Kiev, 1961. 7 pp; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Kiev Order of Lenin State Univ imeni T. G. Shevchenko); 200 copies; price not given; bibliography at end of text (10 entries); (KL, 7-61 sup, 220)

ULITKO, A. F.

20

PHASE I BOOK EXPLOITATION SOV/6086

Nauchnoye soveshchaniye po teplovym napryazheniyam v elementakh turbomashin. 2d, Kiyev, 1961.

Teplovyye napryazheniya v elementakh turbomashin; doklady nauchnogo soveshchaniya., vyp. 2 (Thermal Stresses in Turbomachine Parts; Reports of the Scientific Conference, no. 2). Kiyev, Izd-vo AN UkrSSR, 1962. 174 p. 1800 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut mekhaniki.

Resp. Ed.: A. D. Kovalenko, Academician, Academy of Sciences UkrSSR; Ed.: T. K. Remennik; Tech. Ed.: A. M. Lisovets.

PURPOSE: This collection of articles is intended for scientific workers and turbine designers.

Card 1/6

Thermal Stresses (Cont.)

COVERAGE: The book contains 18 articles dealing with investigations connected with thermal stresses in turbine components. Individual articles discuss thermoelasticity, thermoplasticity, thermal conductivity, and temperature fields. No personalities are mentioned. References accompany 17 articles. The conference recommended broadening the theoretical and experimental investigations of aerothermoelastic and aerothermoplastic problems, the development of investigations of general problems of the theory of thermoelasticity and thermoplasticity based on the thermodynamic principles of reversible and nonreversible processes, the development of effective calculation methods for thermal stresses taking into account plastic deformations and creep in thin- and thick-walled structural members under stationary and nonstationary operating conditions, the development of experimental-research methods for thermometry and tensiometry in connection with modern operational conditions of mechanical structures, and the broadening of investigations of problems in the thermostrength of structures, especially of those operating under conditions of frequent and sharp temperature changes.

ULITKO, A.F.

(12)

S/198/62/008/005/008/009
D234/D308

AUTHOR: Botte, O. V.

TITLE: Dissertations defended in 1961 at the Institutes of the Division of Technical Sciences, AS UkrSSR, in the field of mechanics

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Instytut mekhaniky. Prikladna mekhanika, v..8, no. 5, 1962, 571-575

TEXT: The following dissertations were presented by the collaborators of the above section and approved: For the degree of Candidate of Technical Sciences: Instytut mekhaniky (Institute of Mechanics): Vasyl' Nykolayovych Buyvol, Aspirant: 'Plane problems of the theory of elasticity for multiply-connected regions with cyclic symmetry', on March 16, 1961, at Dnipropetrovsk University. Yaroslav Mykhaylovich Hryhorenko, Junior Scientific Collaborator: 'Stressed state of round plates and conical shells of linearly varying thickness under asymmetric loads', on April 6, at Dnipropetrovsk University. Igor Tymofiyovych Selezov, Aspirant, 'Investigation of the propa-

Card 1/3

Dissertations defended in ... S/198/62/008/005/008/009
D234/D308

gation of elastic waves in plates and shells', on June 19, at Kyyivs'kyy politekhnichnyy instytut (Kiev Politechnic Institute). Andriy Feofanovych Ulitko, Aspirant, 'Solution of 3-dimensional problems of the theory of elasticity by the method of vector eigenfunctions', on September 26, at Kiev University. Mikhaylo Petrovych Petrenko, Junior Scientific Collaborator, 'Transverse and longitudinal vibrations in short rods of constant and variable thickness, due to impacts', on October 24, at Kiev University. Mariya Dmytrivna Synyavs'ka, Junior Scientific Collaborator, 'Increase of wear resistance of piston rings of integral combustion engines with the aid of galvanic coating', on October 24, at Kyyivs'kyy avtomobil'no dorozhnyy instytut (Kiev Institute of Automobiles and Highways). Heorkiy Ivanovych Dybenko, Engineer, 'Change of strength and deformability of ДСП (DSP) plastics in time at increased temperatures', on November 28, at Kiev Institute of Automobiles and Highways. For the degree of Doctor of Technical Sciences: Instytut elektrozvaryuvannya im. Ye. O. Patona (Institute of Electric Welding imeni Ye. O. Paton): Boris Oleksiyovyoh Movchan, Senior Scientific Collaborator, Candidate of Technical Sciences, 'Microscopic

Card 2/3

Dissertations defended in ...

inhomogeneities in cast alloys', on May 16, at the Siberian sections of AS USSR. For the degree of Candidate of Technical Sciences: Instytut mashynoznavstva ta avtomatyky (Institute of Machine Science and Automation): Hryhoriy Semenovyen Kit, Junior Scientific Collaborator, 'Approximate solution of the problem of free torsion', on March 16, at Dnipropetrovsk University. Hryhoriy Vasyl'ovych Plyatsko, Junior Scientific Collaborator, 'Nonstationary problems of heat conduction and thermoelasticity', on April 20, at the Institute of Mechanics of AS UkrSSR. Mykola Yuriyovych Shvayko, Aspirant, 'Some problems of elastoplastic torsion of prismatic rods', on December 25, at L'viv University. Instytut metalokeramiky i spetsial'nykh splaviv (Institute of Metal Ceramics and Special Alloys): Volodymyr Ivanovych Kovpak, Aspirant: 'Investigation of durable strength during programmed change of load and temperature', on October 23, at Kiev Polytechnic Institute.

Card 3/3

GRINCHENKO, V.T.; ULITKO, A.F.

Mixed boundary problem of heat conductivity for a half space. (MIRA 16:11)
Inzh.-fiz.zhur. 6 no.10:67-71 O '63.

1. Institut mekhaniki AN UkrSSR, Kiyev.

ULITKO, A. F.[Ulitko, A. T.]

Work of the Seminar of Mechanics at the Department of Technology of the Academy of Sciences of the Ukrainian S.S.R. in the second half of 1962. Prykl. mekh. 9 no.3:344-346 '63. (MIRA 16:4)

(Academy of Sciences of the Ukrainian S.S.R.)

GRINCHENKO, V.T.; ULITKO, A.F.

Rigorous solution of the axially symmetric problem in the theory of elasticity for a circular rigidly clamped plate. Izv. AN Arm. SSR.Ser.fiz.-mat. nauk 16 no.5:125-132 '63. (MIRA 16:11)

1. Institut mekhaniki AN Ukrainskoy SSR.

L 35586-65 EWT(d)/T/EWP(1) IJP(c)

ACCESSION NR: AP5006088 S/0198/65/001/001/0039/0051

AUTHORS: Polozhiy, G. N. (Kiev); Ulitko, A. F. (Kiev)

TITLE: On inversion formulae for fundamental integral representations of p-analytic functions with characteristics $p = x^k$

SOURCE: Prikladnaya mekhanika, v. 1, no. 1, 1965, 39-51

TOPIC TAGS: analytic function, complex variable, integral operator

ABSTRACT: Let G and G_1 be domains in the right half-plane $z = x + iy$, where G has the imaginary axis L as its bound and G_1 contains some branch L_1 going to infinity, parallel to the real axis; $k = \text{const} > 0$; Ω - is the region consisting of the domain G and its mirror image relative to the imaginary axis. Let H and H_1 [illegible] respectively, and if

[illegible]

Card 1/3

L 35586-65

ACCESSION NR: AP5006986

in mathematical physics $P_0(f) = \frac{1}{\pi}\int_{\Gamma} f(\zeta)\left[\left(\frac{z+\bar{z}}{2}\right)^{1-k} + \left(\frac{z-\bar{z}}{2}\right)\right](z-\zeta)^{\frac{k}{2}-1}(\bar{z}-\zeta)^{\frac{k}{2}-1}d\zeta$

where the Γ -contour in Ω joins the points $-\bar{z} = -\bar{x} + iy$ with the points $z = x + iy$, $\zeta = \xi + i\eta \subset \Gamma$, $f(z) \subset M$; and

$$P_1(f) = \mathrm{Re}\int_{\Gamma} f(\zeta)\left(\frac{z+\bar{z}}{2}\right)^{1-k}(z-\zeta)^{\frac{k}{2}-1}(\bar{z}-\zeta)^{\frac{k}{2}-1}d\zeta +$$

$$+ i\,\mathrm{Im}\int_{\Gamma} f(\zeta)\left(\zeta - \frac{z-\bar{z}}{2}\right)(z-\zeta)^{\frac{k}{2}-1}(\bar{z}+\zeta)^{\frac{k}{2}-1}d\zeta,$$

Γ is the contour in Ω which joins the point at infinity with

integral operators exist not only [illegible] but in many other cases also [illegible] formulas in canonical coordinates where Γ

Card 2/3

L 35586-65

ACCESSION NR: AP5006988

[illegible] cylindrical coordinates and toroidal coordinates [illegible] the real domain [illegible]

ASSOCIATION: Kiyevskiy gosuniversitet--Institut mekhaniki AN UkrSSR (Kiev State University--Institute of Mechanics, AN UkrSSR)

SUBMITTED: 10Sep64 ENCL: 00 SUB CODE: MA

NO REF SOV: 005 OTHER: 001

Card 3/3

GOROSHKO, O.A.; ULITKO, A.F.

Work of the Seminar of Mechanics at the Institute of Mechanics of the Academy of Sciences of the Ukrainian S.S.R. in the first months of 1964. Prikl. mekh. 1 no.1:139-143 '65. (MIRA 18:5)

L 28964-66 EWT(m)/EWP(w) IJP(c) EM

ACC NR: AP6019178 SOURCE CODE: UR/0198/65/001/006/0033/0037

29
B

AUTHOR: Grinchenko, V. T. (Kiev); Ulitko, A. F. (Kiev)

ORG: Institute of Mechanics, AN UkrSSR (Institut mekhaniki AN UkrSSR)

TITLE: Distribution of shearing stresses at the fixed edge of an unevenly heated quarter-plane 26

SOURCE: Prikladnaya mekhanika, v. 1, no. 6, 1965, 33-37

TOPIC TAGS: shear stress, stress distribution

ABSTRACT: The article considers the distribution of shearing stresses at the fixed edge of an elastic quarter-plane which is heated to a constant temperature along a strip at the free edge, with the temperature maintained at zero outside the given strip. It is shown that the shearing stresses are of an exponential character at the angular point and of a logarithmic character at the point of discontinuity of the temperature field. The authors state that the results obtained may be used to find the character of the distribution of shearing stresses on a line of contact which occur during the heating of rigidly clamped heterogeneous elastic bodies. Orig. art. has: 1 figure and 12 formulas. [JPRS]

SUB CODE: 20 / SUBM DATE: 02Jun64 / ORIG REF: 003

Card 1/1 BLG

GRINCHENKO, V.T. (Kiyev); ULITKO, A.F. (Kiyev)

Tension of an elastic space weakened by an annular fissure.
Prikl. mekh. 1 no.10:61-64 '65. (MIRA 18:12)

1. Institut mekhaniki AN UkrSSR. Submitted January 12, 1965.

GRINCHENKO, V.T. (Kiyev); ULITKO, A.F. (Kiyev)

Bending of a rigidly fastened square plate. Prikl. mekh. 1 no.9:134-136 '65. (MIRA 18:10)

1. Institut mekhaniki AN UkrSSR.

29185
S/021/60/000/010/007/016
D251/D303

10.6000 2607 1327

AUTHOR: Ulitko, A.T.

TITLE: On the equilibrium of an elastic cone, loaded with a concentrated moment at the vertex

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 10, 1960, 1349 - 1352

TEXT: The solution of the problem is found by integrating the equilibrium equation in Lami's displacements

$$2\frac{m-1}{m-2}\,\text{grad div}\,\vec{u} - \text{rot rot}\,\vec{u} = 0 \qquad (1)$$

where $\vec{u}$ is the displacement vector, m is Poisson's number for zero boundary conditions. The stress field is regular in the region of the cone except for a singularity at the vertex and vanishes at infinity. The solution is to be found in spherical polar coordinates $x = r \sin\theta \cos\varphi$, $y = r \sin\theta \sin\varphi$, $z = r \cos\theta$. (Fig.). The moment M acts in the plane xoz. The components of $\vec{u}$ in the coordi-

Card 1/5

On the equilibrium of an ...

nate directions are u, v, w. The conditions of the singularity and the antisymmetric stress give

$$u = \frac{1}{r^2} f(\theta) \cos\varphi, \quad v = \frac{1}{r^2} g(\theta) \cos\varphi, \qquad (2)$$

$$w = \frac{1}{r^2} h(\theta) \sin\varphi.$$

where f, g, h are some functions. Evaluation gives

$$f(\theta) = \frac{5m-4}{m} A \sin 2\theta + B \frac{\sin\theta}{1+\cos\theta}, \qquad (4)$$

$$g(\theta) = 2\frac{m-2}{m} A \cos 2\theta - B \frac{1}{1+\cos\theta} + C,$$

$$h(\theta) = -2\frac{m-2}{m} A \cos\theta + B \frac{1}{1+\cos\theta} - C\cos\theta.$$

where A, B, C are some constants. Applying Hooke's law gives for

Card 2/5

On the equilibrium of an ...

the stress

$$\frac{1}{2G}\sigma_r = -\frac{2}{r^3}\left(2A\frac{5m-1}{m}\cos\theta + \frac{B}{1+\cos\theta}\right)\sin\theta\cos\varphi,$$

$$\frac{1}{2G}\sigma_\theta = \frac{1}{r^3}\left(\frac{m-2}{m}A + \frac{B}{2(1+\cos\theta)^2}\right)\sin 2\theta\cos\varphi,$$

$$\frac{1}{2G}\sigma_\varphi = \frac{1}{r^3}\left(3\frac{m-2}{m}A\sin 2\theta + \frac{B}{\sin\theta}\frac{1-\cos\theta+\sin^2\theta}{1+\cos\theta}\right)\cos\varphi,$$

$$\frac{1}{2G}\tau_{r\theta} = \frac{1}{r^3}\left(2\frac{m+1}{m}A\cos 2\theta + \frac{2B}{1+\cos\theta} - \frac{3}{2}C\right)\cos\varphi, \qquad (5)$$

$$\frac{1}{2G}\tau_{\theta\varphi} = \frac{1}{r^3}\left(2\frac{m-2}{m}A + \frac{B}{(1+\cos\theta)^2}\right)\sin\theta\sin\varphi,$$

$$\frac{1}{2G}\tau_{r\varphi} = \frac{1}{r^3}\left(-2\frac{m+1}{m}A\cos\theta - \frac{2B}{1+\cos\theta} + \frac{3}{2}C\cos\theta\right)\sin\varphi$$

On the exterior of the cone

Card 3/5

On the equilibrium of an ...

$$\sigma_{\theta/\theta=\alpha} = \tau_{\theta\varphi/\theta=\alpha} = \tau_{r\theta/\theta=\alpha} = 0,$$

and hence
$$B = -2\frac{m-2}{m}A(1+\cos\alpha)^2 \qquad (6)$$

and
$$C = \frac{4A}{3m}\left[(m+1)\cos 2\alpha - 2(m-2)(1+\cos\alpha)\right]. \qquad (7)$$

A is found from the equilibrium condition

$$M + \int_0^{2\pi} d\varphi \int_0^{\alpha} (\tau_{r\theta}\cos\varphi - \tau_{r\varphi}\cos\theta\sin)r^3 \sin\theta\, d\theta = 0 \qquad (8)$$

considered for arbitrary r = const. The solution is then given, where

$$D(\alpha) = -\frac{2(1-\cos\alpha)^2}{3(m-2)(1+\cos\alpha)^2}\left\{(m+1)\cos^3\alpha + (m+4)\cos^2\alpha + 4(m+1)\cos\alpha + 3m\right\}. \qquad (10)$$

Card 4/5

On the equilibrium of an ...

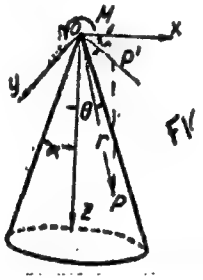
For imcompressible material (m = 2) $\alpha_* = 129^0,7$; for m = 3, $\alpha_* =$ $= 133^0,5$. There are 1 figure and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: E. Sternberg, W. Koiter, J. of Appl. Mech., 25, 575, 1958.

ASSOCIATION: Instytut mekhaniky AN URSR (Institute of Mechanics AS UkrSSR)

PRESENTED: by H.M. Savin, Academician, AS UkrSSR

SUBMITTED: January 21, 1960

Fig.



Card 5/5

ULITKO, A.T.

Coordination conference on the three-dimensional theory of elasticity and plasticity. Prykl.mekh. 7 no.3:345-346 '61. (MIRA 14:6)
(Elasticity)
(Plasticity)

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AUTHOR: Ulitko, A.T. (Kyyiv)

TITLE: Homogeneous solution for determining stresses in spherical shells

PERIODICAL: Prykladna mekhanika, v. 8, no. 3, 1962, 282 - 284

TEXT: A new elementary homogeneous solution for a spherical zone is obtained, analogous to the well-known solutions for cylindrical shells. The author proceeds from the general solution for axisymmetric deformations of a sphere, derived by A.I. Lur'ye (Ref. 1: Prostranstvennyye zadachi teorii uprugosti (Three-Dimensional Problems of Elasticity Theory) GITTL, 1955). The sought-for homogeneous solution is

$$\sigma_r^{(0)} \equiv \tau_{r\theta}^{(0)} \equiv 0; \quad \frac{1}{2G}\sigma_\theta^{(0)} = \frac{B}{r \sin^2 \theta}; \quad \sigma_\varphi^{(0)} = -\sigma_\theta^{(0)}, \quad (4)$$

where B is an integration constant. Formula (4) can be used for the exact solution of the equilibrium problem of an elastic spherical zone, symmetrical with respect to the equator, provided that the

Card 1/2

Homogeneous solution for ...

normal stresses σ_θ vary according to the law 1/r. If this is not the case, formula (4) can be used to solve the problem according to Saint-Venant's principle. As an example, a spherical zone is considered, loaded at the internal radius by the pressure $\sigma_r = - p_1$, and the stress-free at the external surface and finite sections. The solution is obtained in the form of a sum of 2 solutions. The error of the obtained solution is estimated: if the ratio of thickness h to mean shell-radius r_{mean} is 1/2.5, then the error is 12 % approximately; with smaller ratios, the error is smaller. In the limit, when the interior- and exterior radii tend to infinity, one obtains the solution for an infinite plate with a circular hole, subjected to a uniformly distributed pressure. It is noted that solution (4) can be also used for estimating the coefficient of concentration of a spherical shell with a small circular hole. There are 1 figure and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc, (in translation).

ASSOCIATION: Instytut mekhaniky AN URSR (Institute of Mechanics of the AS UkrRSR)

SUBMITTED: July 4, 1960

Card 2/2

ULITKO, A.T.

Activity of the section on continum mechanics of the Mechanics Seminar at the Institute of Mechanics of the Academy of Sciences of the Ukrainian S.S.R. Prykl. mekh. 10 no.2:231-234 '64
(MIRA 17:7)

KOROBKO, N.I. [Korobko, M.I.]; ULIT'KO, V.Ye. [Ulit'ko, V.IU.]; CHERTOV, V.M.

Chromatographic analysis of volatile fatty acids in the rumen contents of ruminants. Ukr.biokhim.zhur. 34 no.6:915-923 '62. (MIRA 16:4

1. Ukrainian Agricultural Academy and the Institute of Physical Chemistry of the Academy of Sciences of the Ukrainian S.S.R.
(RUMEN) (ACIDS, FATTY) (CHROMATOGRAPHIC ANALYSIS)

ULIT'KO, V.Ye. [Ulit'ko, V.IU.]; KOROBKO, I.I. [Korobko, M.I.]; CHERTOV, V.M.

Repeated use of the silica gel column with subsequent regeneration for the chromatographic analysis of volatile fatty acids. Ukr. biokhim. zhur. 35 no.4:606-614 '63. (MIRA 17:11)

1. Ukrainian Agricultural Academy, Institute of Physical Chemistry of the Academy of Sciences of the Ukrainian S.S.R., Kiyev.